

CLAIMS

1. Tension roller or deflection roller for a traction drive, comprising an antifriction bearing (3), having an inner ring (8) positioned by a spacer (4a, 4b) and a threaded connector (5), with traction means adapted to be guided on a running wheel (2) of the tension roller (1) located on an outer ring (10) of the antifriction bearing (3), wherein the antifriction bearing (3) includes, at least on one side, an axially spaced sealing cap (13a, 13b), which overlaps an annular gap (14) between the inner ring (8) and the outer ring (10), wherein the sealing cap (13a, 13b) is fixed detachably with a positive and/or frictional fit indirectly or directly to the outer ring (10) of the antifriction bearing (3) and forms a sealing labyrinth (23a, 23b) with the spacer (4a, 4b), and the sealing caps (13a, 13b) are connected to the spacer (4a, 4b) so that the components are joined captively into one structural unit (34) with the tension roller (1).
2. Tension roller according to claim 1, wherein the outer ring (10) of the antifriction bearing (3) is surrounded by the running wheel (2), which is a pulley produced from plastic.
3. Tension roller according to claim 1, wherein the running wheel (2) comprises an axially extending shoulder (16) with a ring groove (18), formed with a snap-on roller shape for the sealing cap (13a, 13b).
4. Tension roller according to claim 3, wherein the sealing cap (13a, 13b) overlaps the axially extending shoulder (16) of the running wheel (2) in an installation position with a cylindrical rim (15) and locks into the ring groove (18) of the shoulder (16) with at least partially radially inwardly directed tabs (17).
5. Tension roller according to claim 4, wherein the sealing cap (13a) has at least one radially directed bore hole (40) or opening in a region of the cylindrical rim (15).

6. Tension roller according to claim 4, wherein an axially directed projection (25) of the sealing cap (13a) engages in an end recess (26) of the shoulder (16) connected integrally to the running wheel (2) to form a rotational lock (24).

7. Tension roller according to claim 1, wherein the sealing cap (13b) engages in a positive fit, with play, in an annular groove (29) of the spacer (4b), which is formed axially offset to a shoulder (33) of the spacer (4b), on which the inner ring (8) of the antifriction bearing (3) is supported.

8. Tension roller according to claim 7, wherein a radial overlap "Y" of ≥ 0.5 mm is provided between inner contours of a radial leg (19b) of the sealing cap (13b) and a groove wall (31) or outer surface (35) of the spacer (4b).

9. Tension roller according to claim 7, wherein a radial leg (19b) of the sealing cap (13b) which is part of the sealing labyrinth (23b) is provided with partial wall thickness reduced zones (38) distributed peripherally.

10. Tension roller according to claim 7, wherein the annular groove (29) is defined in the spacer (4b) by groove walls (30, 31), having heights that are different from each other.

11. Tension roller according to claim 1, wherein the sealing cap (13a) has a radial leg (19a) that is allocated with play to a radial shoulder (22) of the spacer (4a).

12. Tension roller according to claim 1, wherein the antifriction bearing (3) is positioned on a centering collar (7) of the spacer (4a) and is supported on a shoulder (9).

13. Tension roller according to claim 4, wherein the cylindrical rim (15) of the sealing cap (13b) has peripherally distributed cuts (41), which extend for a limited length into a radial leg (19b).

14. Tension roller according to claim 1, in which a radial leg (19a, 19b) of the sealing cap (13a, 13b) has a crimped section (27) for providing a defined axial distance of the sealing labyrinth (23a, 23b) to the antifriction bearing (3).

15. Tension roller according to claim 1, wherein a radial leg (19a) of the sealing cap (13a) comprises a sealing ring (39) in a region of the sealing labyrinth (23a).

16. Tension roller according to claim 1, wherein the sealing cap (13a, 13b) includes a circular grease collar in a region of the sealing labyrinth (23a, 23b).

17. Tension roller according to claim 1, wherein the sealing cap (13a, 13b) is produced without cutting from a metallic material.

18. Tension roller according to claim 1, wherein the sealing cap (13a, 13b) is produced from an elastic material.